

ABSTRACT OF THE DISCLOSURE

The present invention discloses a method for quickly and easily authenticating large computer program. The system operates by first sealing the computer program with digital signature in an incremental manner. Specifically, the computer program is divided into a set of pages and a hash value is calculated for each page. The set of hash values is formed into a hash value array and then the hash value array is then sealed with a digital signature. The computer program is then distributed along with the hash value array and the digital signature. To authenticate the computer program, a recipient first verifies the authenticity of the hash value array with the digital signature and a public key. Once the hash value array has been authenticated, the recipient can then verify the authenticity of each page of the computer program by calculating a hash of a page to be loaded and then comparing with an associated hash value in the authenticated hash value array. If the hash values do not match, then execution may be halted.